A grey-brown, richly humic soil, permeable and retentive of moisture, alternates locally with loams and sandy loams. The underlying ironstone beds outcrop in the bushland towards the escarpment. Large ant-hills containing lime nodules are a characteristic feature in an area of otherwise non-calcareous soil.(1) Livingstone(2) mentions hot sources "at which maize and cassava can be boiled" south of Kalungwishi. They are more typical of the country farther north. Among the *chipya* vegetation (mixed deciduous woodland with tall grasses and bracken), now predominant, there still survive on moister sites patches of dense evergreen thicket (*mateshi*), remnants of the equatorial rain forest which must have prevailed in the earlier, more humid regime.

MAIN FEATURES OF ECONOMY

AGRICULTURE(3)

Cassava, the staple crop, is planted on rectangular or, more often, round mounds which remain in semi-permanent cultivation with periodic fallows. Rotted grass turf is used as manure. Groundnuts and, in Shila villages, ground-beans, an important subsidiary crop, are usually grown on newer land. Balls of groundnuts stored in the trees are a characteristic feature in the villages. Sweet potatoes, maize, beans, pumpkins, Kaffir corn, are also cultivated in the main gardens. Cowpeas, edible gourds, and castor oil are grown as catch crops. Finger millet is grown for beer. Occasionally accompanied by bulrush millet and cattle melons, it occupies the thicket (north of Mbereshi) and, more usually, the small *citemene* gardens, measuring up to one-third of an acre each, on the clearings in the foothill woodland. These gardens, encountered more frequently among the Chishinga-Lunda than among the Shila, are abandoned after a few years' exploitation. Small *matimba* gardens under early maturing varieties of maize (consumed green), rice, bananas and sugar cane are made on the moist and very fertile acacia *damboes* east of Lake Mweru. These are more characteristic of the Bwile country. Rice plots, particularly exposed to the depredations of birds, are protected by bark rope birdscarers, and shelters are erected for the watchers to keep off the hippo. Pineapples, mangoes and pawpaws are successfully grown in the area as is oil-palm, which is common on Kilwa island. Tobacco, Asiatic and white yams, Lima beans, chillies, sesame, and cotton, are among the minor crops grown in the village gardens alongside the huts. Curcas oil is planted for fences in some Chishinga-Lunda villages. Irrigated wheat is found on mission farms and an attempt has been made to introduce coffee as a cash crop.

LIVESTOCK

Prevalence of tsetse fly, as well as the lack of pastoral traditions, were responsible for the virtual absence of cattle. Lukwesa (1760-1805) kept a few head of black cattle as a matter of prestige.(4) They were neither milked nor killed for meat and could graze where they pleased on the cultivated land of his subjects.(5) Lately the keeping of cattle has been

(1) Livingstone, I, p.247.
(2) ibid., p.270.
(3) Based on C. G. Trapnell.
(4) Burton, op.cit., p.129.
(5) Gamitto, 1, p.390.